(carbon oxide-ethylene; **polyketone soln.** and manuf. of polyketone fibers)

IT **Polyketones**
(fiber; **polyketone soln.** and manuf. of polyketone fibers)

IT **Polyketones**
(fibers; **polyketone soln.** and manuf. of polyketone fibers)

IT **25052-62-4P**, Carbon monoxide-ethylene copolymer
(fiber; **polyketone soln.** and manuf. of polyketone fibers)

IT **7646-85-7, Zinc chloride**, uses
7647-14-5, Sodium chloride, uses **10043-52-4, Calcium chloride**, uses
(**polyketone soln.** and manuf. of polyketone fibers)

L38 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS
2000:869762 Document No. 134:18440 Polyketone fibers with high tensile strength manufactured by spinning carbon monoxide-olefin copolymer solutions containing palladium, nickel, or cobalt in aqueous zinc halide solutions with good spinnability and manufacture thereof and composite materials therefrom. Kato, Jinichiro; Morita, Toru (Asahi Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000345431 A2 20001212, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-159258 19990607.

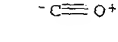
AB The fibers consist of polymers (A) contg. .gtoreq.90% CO-olefin alternating copolymer units and contain .ltoreq.100 ppm Pd, Ni, and/or Co. The fibers are prepd. by spinning solns. contg. 0.005-70% A in .gtoreq.1 aq. zinc halide (B) soln. or aq. mixts. comprising .gtoreq.1 zinc halide and .gtoreq.1 metal salt other than B and showing amt. of dissoln. in H2O at 50.degree. .gtoreq.1% into a coagulating bath to form coagulated fibers with H2O content .gtoreq.50% or coagulating the fibers and washing the fibers with H2O at pH .ltoreq.4 to form fibers with Zn content .ltoreq.10,000 ppm, drying the fibers at .gtoreq.50.degree. for partial or complete removal of H2O from the fibers, and drawing the fibers. The fibers are useful for tire cords , belts, radiator hoses, sewing yarns, and ropes and as cement reinforcing materials. A soln. contg. 12% Claim 15 CO-ethylene copolymer (I) in 65:10:25 **ZnCl2**/NaCl/H2O was spun into air, passed through a coagulating bath, washed, dried, and drawn to total draw ratio 12.6 to give fibers with Pd content 37 ppm and Zn content 70 ppm and exhibiting tenacity 11.4 g/denier, elongation 5.6%, and elasticity 146%. The fibers were twisted to form cords, coated with an epoxy resin (II) to II content 5%, dried, and laminted with chloroprene rubber to give a V belt exhibiting good retention of tensile strength of I fibers ad detd. by a specified testing.

IT **25052-62-4P**, Carbon monoxide-ethylene copolymer
(fiber; polyketone fibers with high tensile strength manufd. by spinning carbon monoxide-olefin copolymer solns. contg. palladium, nickel, or cobalt in aq. zinc halide solns. with good

spinnability)
RN 25052-62-4 HCAPLUS
CN Ethene, polymer with carbon monoxide (9CI) (CA INDEX NAME)

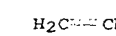
CM 1

CRN 630-08-0
CMF C O

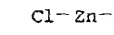


CM 2

CRN 74-85-1
CMF C2 H4



IT **7646-85-7, Zinc chloride,** uses
(solvent; polyketone fibers with high tensile strength manufd. by spinning carbon monoxide-olefin copolymer solns. contg. palladium, nickel, or cobalt in aq. zinc halide solns. with good spinnability for)
RN 7646-85-7 HCAPLUS
CN Zinc chloride (ZnCl2) (9CI) (CA INDEX NAME)



IC ICM D01F006-76
ICS B60C009-00; C08G067-02; C08J005-04; D01F006-30; F16G005-06; C08L021-00
CC 39-13 (Synthetic Elastomers and Natural Rubber)
Section cross-reference(s): 40, 58
ST polyketone fiber spinning stability; carbon monoxide ethylene copolymer fiber spinning stability; tensile strength polyketone fiber; belt reinforcement polyketone fiber; tire cord polyketone fiber manufg; radiator hose polyketone fiber manufg; cement reinforcement polyketone fiber manufg; rope polyketone fiber manufg; **composite** reinforcement **polyketone** fiber manufg
IT Belts
Fiber-reinforced **composites**
Ropes
Tire cords
(**polyketone** fibers with high tensile strength manufd. by spinning carbon monoxide-olefin copolymer solns. contg.

palladium, nickel, or cobalt in aq. zinc halide solns. with good spinnability for)

IT **25052-62-4P**, Carbon monoxide-ethylene copolymer
49603-60-3P, Carbon monoxide-ethylene copolymer, sru
(fiber; polyketone fibers with high tensile strength manufd. by spinning carbon monoxide-olefin copolymer solns. contg. palladium, nickel, or cobalt in aq. zinc halide solns. with good spinnability)

IT **7646-85-7**, **Zinc chloride**, uses
7647-14-5, Sodium chloride, uses
(solvent; polyketone fibers with high tensile strength manufd. by spinning carbon monoxide-olefin copolymer solns. contg. palladium, nickel, or cobalt in aq. zinc halide solns. with good spinnability for)

L38 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS
2000:697469 Document No. 133:268170 Polyketone fibers with high modulus and improved dimensional stability and heat resistance at high temperatures and manufacture thereof. Taniguchi, Toru; Morita, Toru (Asahi Chemical Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000273720 A2 20001003, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-77220 19990323.

AB The fibers exhibit min. storage modulus (E') at 50-150.degree. as detd. by the dynamic **viscoelastic** measurement at 110 Hz or the fibers exhibit E' at 180.degree. and 110 Hz .gtoreq.80 g/denier and shrinkage at 180.degree. .ltoreq.4%, and the fibers consist of polyketones or polyketones comprising carbon monoxide-olefin copolymers (A) or polymers contg. .gtoreq.90% A units or polyketones showing intrinsic **viscosity** (.eta.) .gtoreq.0.3. The fibers are prepd. by spinning dopes contg. **polyketones** in aq. **solns**. contg. .gtoreq.50% **zinc salts** or **ZnCl2** or **zinc** complex **salts** with metals other than Zn, removing the solvents from the fibers, and drawing the fibers at a temp. (T) from 150.degree. to m.p. of the fibers and drawing stress (.sigma.) .gtoreq.(2.25-0.005T) g/denier. The fibers are useful for tire cords (no data). A dope contg. carbon monoxide-ethylene copolymer with .eta. (in m-cresol, at 60.degree.) 4.6 in an aq. soln. contg. 75% **ZnCl2** was spun into an aq. coagulating bath at 10.degree., washed, wound at 5.6 m/min, dried, drawn to draw ratio 2.3 at 240.degree., subsequently drawn to draw ratio 2.3 at 240.degree. and .sigma. 1.6 g/denier to give fibers with tenacity 10.2 g/denier and elongation 4.5% and showing min. E' at 95.degree. and exhibiting E' at 180.degree. 120 g/denier and shrinkage (JIS L-1013) at 180.degree. 2.1%.

IT **25052-62-4**, Carbon monoxide-ethylene copolymer
(fiber; polyketone fibers with high modulus and improved dimensional stability and heat resistance at high temps. and manuf. thereof)

RN 25052-62-4 HCAPLUS

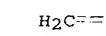
CN Ethene, polymer with carbon monoxide (9CI) (CA INDEX NAME)

CM 1

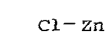
CRN 630-08-0
CMF C O

CM 2

CRN 74-85-1
CMF C2 H4



IT **7646-85-7, Zinc chloride**, uses
(solvent; polyketone fibers with high modulus and improved dimensional stability and heat resistance at high temps. and manuf. thereof for)
RN 7646-85-7 HCAPLUS
CN Zinc chloride (ZnCl2) (9CI) (CA INDEX NAME)



IC ICM D01F006-76
ICS D01F006-30; C08L073-00
CC 40-2 (Textiles and Fibers)
Section cross-reference(s): 39
ST polyketone fiber heat resistant manufg; carbon monoxide ethylene copolymer fiber heat resistant manufg; tensile strength polyketone fiber heat resistant; modulus polyketone fiber heat resistant; tire cord polyketone fiber heat resistant; **zinc chloride** solvent polyketone fiber manufg
IT **25052-62-4**, Carbon monoxide-ethylene copolymer
(fiber; polyketone fibers with high modulus and improved dimensional stability and heat resistance at high temps. and manuf. thereof)
IT **7646-85-7, Zinc chloride**, uses
(solvent; polyketone fibers with high modulus and improved dimensional stability and heat resistance at high temps. and manuf. thereof for)

L38 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS
2000:133767 Document No. 132:167161 **Polyketone** aqueous **solutions** useful for manufacture of fibers. Kato, Jinichiro; Morita, Toru; Fujieda, Kiyoshi (Asahi Kasei Kogyo Kabushiki Kaisha, Japan). PCT Int. Appl. WO 2000009611 A1 20000224,

34 pp. DESIGNATED STATES: W: JP, KR, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1999-JP4235 19990805. PRIORITY: JP 1998-236595 19980810; JP 1999-72091 19990317.

AB The solns. contain a copolymer of carbon monoxide with an olefin and a solvent, wherein at least 90% of the copolymer is accounted for by carbon monoxide units and olefin units and the solvent is an aq. soln. of at least one member selected from the group consisting of a **Zn, Ca salt, thiocyanate**, and **Fe salt**. Thus, mixing a CO-ethylene-propylene copolymer (propylene content 6 mol%; intrinsic **viscosity** 0.5 dL/g; in hexafluoroisopropanol at 25.degree.) with a 70% aq. soln. of **Zn chloride** at 60.degree. gave a dope contg. 10% polymer, which could be recovered as fibril product.

IT **25052-62-4P**, Carbon monoxide-ethylene copolymer
(**polyketone** aq. **solns.** useful for manuf. of fibers)

RN 25052-62-4 HCAPLUS

CN Ethene, polymer with carbon monoxide (9CI) (CA INDEX NAME)

CM 1

CRN 630-08-0
CMF C O

CM 2

CRN 74-85-1
CMF C2 H4

IT **7646-85-7, Zinc chloride**, uses
(solubilizing agents; **polyketone** aq. **solns.** useful for manuf. of fibers)

RN 7646-85-7 HCAPLUS

CN Zinc chloride (ZnCl2) (9CI) (CA INDEX NAME)

IC ICM C08L073-00
ICS C08J003-03; D01F006-28

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 40
ST carbon monoxide ethylene propylene copolymer soln; **zinc chloride** aq **soln polyketone**; **calcium salt** aq **soln polyketone** ; fibril **polyketone** aq **soln**
IT Polyketones
Polyketones
Polyketones
Polyketones
(carbon monoxide-based, fiber; **polyketone** aq. **solns**. useful for manuf. of fibers)
IT Polyolefin fibers
Polyolefin fibers
Polyolefin fibers
Polypropene fibers, preparation
Polypropene fibers, preparation
Polypropene fibers, preparation
Synthetic polymeric fibers, preparation
Synthetic polymeric fibers, preparation
Synthetic polymeric fibers, preparation
(carbon monoxide-ethylene-propene; **polyketone** aq. **solns**. useful for manuf. of fibers)
IT Nonwoven fabrics
Solubilizers
(**polyketone** aq. **solns**. useful for manuf. of fibers)
IT **Polyketones**
(**polyketone** aq. **solns**. useful for manuf. of fibers)
IT **25052-62-4P**, Carbon monoxide-ethylene copolymer
88995-51-1P, Carbon monoxide-ethylene-propylene copolymer
(**polyketone** aq. **solns**. useful for manuf. of fibers)
IT 333-20-0, Potassium thiocyanate **7646-85-7**, **Zinc chloride**, uses 7705-08-0, Ferric chloride, uses 7789-41-5, Calcium bromide 10102-68-8, Calcium iodide
(solubilizing agents; **polyketone** aq. **solns**. useful for manuf. of fibers)
IT 7647-14-5, Sodium chloride, uses 7757-82-6, Sodium sulfate, uses
(solubilizing co-agents; **polyketone** aq. **solns** . useful for manuf. of fibers)

L38 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS
1991:186933 Document No. 114:186933 Photodegradable olefin polymer mixtures and their preparation and use as films. Hobes, John; Payer, Wolfgang (Hoechst A.-G., Germany). Ger. Offen. DE 3921144 A1 19910110, 5 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1989-3921144 19890628.
AB The title mixts. contain 75-95% low-pressure polyolefin as well as 10-150 ppm carboxylic acid salt of an element of at. no. 22-58 and 5-25% copolymer of C2H4, CO, and optionally other monomers. The salt and CO copolymer accelerate the photodegrdn. of the mixts.